Food Salvage

Utilization and Disposition

U.S. Air Force Public Health

Overview

- Purpose/Role
- Recommendations
- The “Guide”

Purpose/Role

To ensure Public Health personnel make sound decisions concerning inspected food to protect the health of the consumer and the financial interests of the government

Recommendations

Recouping - reimbursement of a product with the identical product or monetary compensation

Reworking - removing or replacing defective units of product

Recommendations

- Early Issue/Accelerated Use
- Forced Substitution
- Forced Issue
- Further Inspection/Laboratory Testing
- Condemnation

Recommendations
Condemnation of Subsistence

Certificate of Unfitness

- Unfit for human consumption
- Unfit for its intended use

Signature

- PH or Medical Officer
- Food Inspector

Condemnation of Subsistence

Medical Inspector

- Only determines wholesomeness/fit for intended purpose

Accountable Property Officer

- Responsible for disposition (destruction, disposal, vendor credit, etc.)

Foods Exposed to Refrigeration Failure

- **Guide to the Salvage of Chilled/Frozen Foods Exposed to Refrigeration Failure (Dec 1997)**
  - **Scientific based guidelines**
  - **Objective is to replace "when in doubt, throw it out" practice**
  - **Available on the Web @ http://wwwsam.brooks.af.mil/eh/html/food.htm**

Step #1
Estimating the time of exposure

Ambient air temperature

- Electronic warning devices/alarms
- Stoppage of clock/electric company
- Worst case scenario

Step #2
Classification of Foods

SAFE - refrigeration is used to maintain quality, not control pathogen growth

- Low pH and/or reduced Aw
- Separate or remove safe foods
- Marketability - accountable officer
- Table 1, List of Safe Foods (page 6)
- If not listed on Table 1, use Figure 2, Flow Chart for Classifying Foods Exposed to Refrigeration Failure (page 7)

Step #2 cont'd
Classification of Foods

RISK 1 **- Chilled canned ham**

- Incomplete canning process
- No recontamination chance
- *Concerns*

sporeformers *(botulism & b. cereus)*

Step #2 cont'd
Classification of Foods

RISK 2

- **Precooked and/or ready to eat PHFs that are originally frozen**
  - ✓ Slowed listeria monocytogenes growth
- **Raw, salted/cured PHFs**
  - ✓ Inhibited/slowed bacterial growth
  - ✓ ***Concern*** - staph aureus growth and toxin production

Step #2 cont'd
Classification of Foods

RISK 3 *Highest* potential microbial risk

- Precooked and/or ready to eat PHFs

not originally frozen or canned

✓*Concern* - listeria monocytogenes growth

- PHFs *not* salted/cured

✓*Concern* - bacterial growth/toxin production

Step #3
Determine Product Temperature

Use Figure 1, Taking Product Temperatures (page 4)

Step #3 cont'd **Determine Product Temperature**

Power Outage - all electrical systems

- Temperature gradient emerges with the top layer being the warmest, bottom coldest

- Take two temp readings of the warmest part of lot (corner packages of top layer)

- Record highest

Step #3 cont'd
Determine Product Temperature

- **Mechanical Failure -** fans still working
  - Circulated air - middle layer(s) are the coldest
  - Take two temp readings of the warmest part of lot (corner packages on top and bottom layer) - record highest

* ***Be careful to avoid cross-contamination!***

For

Step #4
Time-temperature Limits

- Compare exposure times and temperatures with Table 2, Time -Temperature Limits (page 8)

Step #5
Make Disposition Decision(s)

- **Foods within Time-Temperature Limits (TTL) -** *Salvage*
- **Foods not within TTL -** *Reject*
  - **Power outage - reject top layer and take temp of "new" top layer**
  - **Mechanical failure - reject top and bottom layers and take temps of "second" layers**

Step #5 cont'd
Make Disposition Decision(s)

Reject all RISK 3 foods exceeding 4 hours of abuse, *except for:*

- Raw flesh foods
- Unopened pasteurized products
- *Not showing signs of*
- May be displayed un refrigeration 24 hours *with warning label*

Reporting

Freezer and Display case outages

- ✔ Duration of Abuse
- ✔ Type of Products Involved
- ✔ Final Temperature of Product
- ✔ Disposition

Information can be obtained from the Refrigeration Failure Form (sample working form - page 12)

- *– Ensure the manager receives copies*

Exercise…the Scenario

- Recall…Recall…Recall
- Equipment - Guide, Calibrated Thermometer, Clipboard and Pen
- Beeper Warning System

Exercise…the Scenario

- Power Failure - 5 hours
- Products:
  - ✓Chicken Quarters (Raw)
  - ✓Pork Tenderloins (Raw)
  - ✓Breakfast Sausage (Beef, Raw)
  - ✓Chilled, Canned Ham
  - ✓Summer Sausage (Beef, Fermented)
  - ✓Bacon Slices (Salt cured)
  - ✓American Cheese (Processed)
  - ✓Ricotta Cheese

Exercise…Your Findings

Reach-in Refrigerator

Chicken Quarters	Pork Tenderloin	Breakfast Sausage	Canned Ham	Summer Sausage	Bacon Slices	American Cheese	Ricotta Cheese
1st layer 54°F	1st layer 50°F	1st layer 52°F	1st layer 68°F	1st layer 68°F	1st layer 70°F	1st layer 57°F	1st layer 48°F
2nd layer 47°F	2nd layer 42°F	2nd layer 44°F	2nd layer 64°F	2nd layer 61°F	2nd layer 66°F	2nd layer 52°F	2nd layer 44°F
3rd layer 40°F	3rd layer 38°F	3rd layer 40°F	3rd layer 59°F	3rd layer 57°F	3rd layer 61°F	3rd layer 47°F	3rd layer 39°F

Summary

- **Purpose / Role**
- **Recommendations**
- **The “Guide”**